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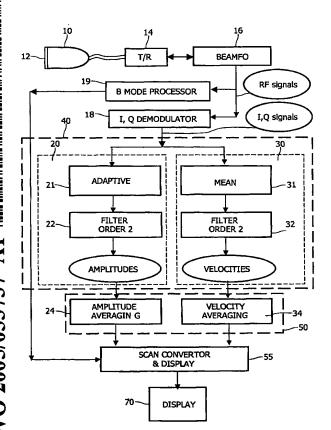
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# (54) Title: CLUTTER FILTERING WITH SMALL ENSEMBLE LENGTHS IN ULTRASOUND IMAGING



(57) Abstract: An ultrasound imaging system comprising: a probe (10) with an array of transducer elements (12) for acquiring ultrasound data of a body, including moving tissue and fluid flow; a beamforming system (10, 12, 14, 16) for emitting and receiving ultrasound beams in said body, which uses, for each transmission beam, an ensemble length of more than two temporal samples and less than eight; processing means (40, 50) to process flow Doppler signals comprising adaptive clutter demodulation (21) applied on amplitude signals and mean clutter demodulation applied on phase signals followed by high-pass filtering (22, 32); and display means (55,70) to display images based on said processed flow Doppler signals.



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### **Declaration under Rule 4.17:**

— as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,

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